AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A replicon RNA, which is a subgenomic replicon RNA

derived from hepatitis C virus, wherein said subgenomic replicon RNA comprises a nucleotide

sequence containing at least the 5' untranslated region, the nucleotide sequence encoding NS3

protein, NS4A protein, NS4B protein, NS5A protein and NS5B protein and the 3' untranslated

region on the from the genomic RNA of JFH-1 strain of hepatitis C virus of genotype 2a.

2. (Original) The replicon RNA of claim 1, containing at least one selection marker

gene or a reporter gene, and at least one IRES sequence.

3. (Currently Amended) A replicon RNA, comprising a nucleotide sequence

containing the 5' untranslated region comprising the nucleotide sequence represented by SEO ID

NO: 9 or 10; at least one selection marker gene or a reporter gene; an IRES sequence; the

nucleotide sequence encoding NS3 protein, NS4A protein, NS4B protein, NS5A protein and

NS5B protein on the from the genomic RNA of JFH-1 strain of hepatitis C virus of genotype 2a;

and the 3' untranslated region comprising the nucleotide sequence as set forth in SEO ID NO: 11

or 12.

4. (Withdrawn) The replicon RNA of claim 1, wherein the genomic RNA of JFH-1

strain of hepatitis C virus of genotype 2a is an RNA comprising the nucleotide sequence as set

forth in SEQ ID NO: 3 or 5.

2

SWG/eaw

Docket No.; 1254-0299PUS1

Application No. 10/558,155 Amendment dated July 30, 2010

Reply to Office Action of April 30, 2010

5. (Previously Presented) A replicon RNA, comprising the following RNA (a) or (b):

Docket No.: 1254-0299PUS1

(a) an RNA comprising the nucleotide sequence set forth in SEQ ID NO: 1 or 2;

(b) an RNA comprising a nucleotide sequence derived from the nucleotide sequence as

set forth in SEQ ID NO: 1 or 2 by deletion, substitution or addition of 1 to 10 nucleotides, and

being capable of autonomous replication.

6. (Previously Presented) A replicon-replicating cell, which is prepared by

introducing the replicon RNA of claim 1 into a cell.

7. (Original) The replicon-replicating cell of claim 6, wherein the cell is a eukaryotic

cell.

8. (Original) The replicon-replicating cell of claim 7, wherein the eukaryotic cell is a

human liver-derived cell, a human uterine cervix-derived cell or a human fetal kidney-derived

cell.

9. (Original) The replicon-replicating cell of claim 7, wherein the eukaryotic cell is any

one cell selected from the group consisting of an Huh7 cell, an HepG2 cell, an IMY-N9 cell, an

HeLa cell and a 293 cell.

10. - 13. (Canceled)

Application No. 10/558,155 Docket No.: 1254-0299PUS1 Amendment dated July 30, 2010

Reply to Office Action of April 30, 2010

(Withdrawn) A method of producing a replicon RNA of JFH-1 strain of hepatitis

C virus of genotype 2a, comprising extracting the replicon RNA from the replicon-replicating

cell of claim 6.

15. (Withdrawn) A method of producing a viral protein of JFH-1 strain of hepatitis

C virus of genotype 2a, comprising culturing the replicon-replicating cell of claim 6, and

obtaining the viral protein from the resulting culture product.

16. (Withdrawn) A method of screening for a substance promoting or suppressing

the replication of hepatitis C virus, comprising culturing the replicon-replicating cell of claim 6

in the presence of a test substance, and detecting the replication of a replicon RNA in the

resulting culture product.

17. (Withdrawn) A method of increasing the replication efficiency of the replicon

RNA of JFH-1 strain of hepatitis C virus of genotype 2a, comprising performing once or more

the following: obtaining a replicated replicon RNA from the replicon-replicating cell of claim 6,

and introducing the thus obtained replicated replicon RNA into a cell that is different from the

4

replicon-replicating cell so as to prepare a new replicon-replicating cell.

Application No. 10/558,155
Amendment dated July 30, 2010

Docket No.; 1254-0299PUS1

Reply to Office Action of April 30, 2010

18. (Withdrawn) The method of claim 17, wherein the replication efficiency

increases to become at least two times greater than that of the replicon RNA that is introduced at

the beginning into the replicon-replicating cell.

19. (Withdrawn) A method of producing a replicon RNA of JFH-1 strain of hepatitis

C virus of genotype 2a having increased replication efficiency, comprising performing once or

more the following: obtaining a replicated replicon RNA from the replicon-replicating cell of

claim 6, and introducing the thus obtained replicated replicon RNA into a cell that is different

from the replicon-replicating cell so as to prepare a new replicon-replicating cell; and obtaining a

replicated replicon RNA from the finally obtained replicon-replicating cell.

20. (Withdrawn) A method of producing a replicon RNA of JFH-1 strain of hepatitis

C virus of genotype 2a having increased replication efficiency, comprising detecting a nucleotide

mutation or an amino acid mutation between the replicon RNA that is produced so as to have an

increased replication efficiency by the method of claim 19 and the replicon RNA that is

introduced at the beginning into the replicon-replicating cell; and introducing the thus detected

nucleotide mutation or amino acid mutation into a replicon RNA whose replication efficiency is

to be increased.

21. (Currently Amended) A replicon RNA, comprising a nucleotide sequence derived

from the nucleotide sequence as set forth in SEQ ID NO: 1, by at wherein said nucleotide

comprises at least one mutation selected from the group consisting of the following (a) to (u):

Application No. 10/558,155 Docket No.: 1254-0299PUS1

Amendment dated July 30, 2010 Reply to Office Action of April 30, 2010

(a) a mutation from A to G at nucleotide site 7157;

- (b) a mutation from C to U at nucleotide site 4955;
- (c) a mutation from A to G at nucleotide site 4936;
- (d) a mutation from A to G at nucleotide site 5000;
- (e) a mutation from A to G at nucleotide site 7288;
- (f) a mutation from G to U at nucleotide site 5901:
- (g) a mutation from A to U at nucleotide site 6113;
- (h) a mutation from A to G at nucleotide site 2890:
- (i) a mutation from C to A at nucleotide site 6826;
- (i) a mutation from C to A at nucleotide site 6887:
- (k) a mutation from U to A at nucleotide site 6580;
- (l) a mutation from U to C at nucleotide site 7159;
- (m) a mutation from U to A at nucleotide site 7230:
- (n) a mutation from C to A at nucleotide site 6943;
- (o) a mutation from G to A at nucleotide site 5687:
- (p) a mutation from A to G at nucleotide site 6110;
- (q) a mutation from U to C at nucleotide site 5550;
- (r) a mutation from A to G at nucleotide site 7217;
- (s) a mutation from A to G at nucleotide site 3643;
- (t) a mutation from G to A at nucleotide site 5851; and

6

(u) a mutation from G to A at nucleotide site 5914.

Application No. 10/558,155 Amendment dated July 30, 2010 Reply to Office Action of April 30, 2010 Docket No.: 1254-0299PUS1

22. Canceled -

23. (Previously Presented) A replicon RNA comprising SEQ ID NO:1.

7